- Q1. a) After evaluating the Sequential BFS, find out what are the possible opportunities for parallelism.
  - b) How we use the concept of bags to implement parallelism in BFS.
  - c) What are Pennants
  - d) Explain bag Union and bag splitting
  - e) Show the conversion of sequential algorithm into a Parallel BFS algorithm.

(5 Marks)

Q2. Draw a binary tree and the traversal using a Euler Tour. How it is different from the traditional traversal techniques. How we can find the successor function using the Euler Tour traversal. Take an example to put across your point.

(2.5 Marks)

Q3. Parallel Independent sets are helpful in resolving the Work-optimal list scan. Give a step by step working of Parallel Independent sets and the way it helps to handle the work-optimal list scan.

(2.5 Marks)